

STATE LANDS COMMISSION

REGULATIONS GOVERNING THE MANAGEMENT OF BALLAST WATER FOR VESSELS ARRIVING AT CALIFORNIA PORTS OR PLACES AFTER DEPARTING FROM PORTS OR PLACES WITHIN THE PACIFIC COAST REGION

Initial Statement of Reasons

Title 2, Division 3, Chapter 1, Article 4.6

SPECIFIC PURPOSE OF THE REGULATION

As mandated by Section 71204.5 of the Public Resource Code, the purpose of this regulation is to establish management practices for ballast water that is taken on by marine vessels in ports or places within the Pacific Coast Region and is to be discharged in a California port or place. This, in turn, would minimize the transport of nonindigenous species in ballast water discharged into state waters.

NECESSITY

A nonindigenous species (NIS) is an organism that has been transported by humans to locations beyond its natural range. Once a species becomes established in a new area, it can cause severe adverse economic, ecological, and public health consequences in its new habitat. The transport of ballast water in marine vessels is recognized as a major vehicle through which aquatic NIS are spread. Current California law requires that vessels originating from places outside of the United States Exclusive Economic Zone (U.S. EEZ) manage ballast water to reduce the discharge of nonindigenous organisms in California waters. However, there is currently no ballast management requirement for vessels that arrive in California ports from places within the U.S. EEZ, and in particular, the Pacific Coast Region, even though research has shown that there is a significant threat for such voyages to facilitate the establishment and spread of NIS throughout a region.

The ballast water management practices prescribed by these proposed regulations are necessary to minimize the transport of Pacific Coast Region NIS into the waters of the State of California.

TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY, REPORTS, OR DOCUMENTS.

Barth, J., Collins, C., Hickey, B. 2003. West Coast Oceanography: Implications for Ballast Water Exchange, Draft Report prepared for West Coast Ballast Outreach Project. McDowell, K, and Sytsma M. Ed. San Francisco, CA. 36 pgs.

Carlton, James. Williams College. (personal communication, 12/13/2004).

Cohen, Andrew. San Francisco Estuary Institute. (personal communication, 12/13/2004).

Crooks, Jeffrey. Tijuana Estuary National Estuarine Research Reserve. (personal communication, 12/14/2004).

Kimmerer, Wim. Romberg Tiburon Center, San Francisco State University. (personal communication, 12/15/2004).

Lavoie, D.M., L.D. Smith, G.M. Ruiz. 1999. The potential for Intracoastal Transfer of non-indigenous species in the Ballast Water of Ships. *Estuarine, Coastal, and Shelf Science*. 48: 551-564.

Mikel T.K., Velarde, R.G., Ranasinghe, J.A., Weisberg, S.B., Montagne, D.E., Cadien, D.B., Smith, R.W., Dalkey, A. 2004. The prevalence of non-indigenous species in southern California embayments and their effects on benthic macroinvertebrate communities. Southern California Coastal Water Research Project. Annual Report 2001-2002.. 246-252.

Parsons, M.G. 1998. Flow-through ballast water exchange. *Society of Naval Architects and Marine Engineers Transactions*. 106: 485-493.

Ruiz, G.M., J.T. Carlton, E.D. Grosholz, A.H. Hines. 1997. Global invasions of marine and estuarine habitats by non-indigenous species: Mechanisms, extent and consequences. *American Zoologist*. 37: 621-632.

Zhang, F., and Dickman, M. 1999. Mid-Ocean exchange of container vessel ballast water. 1: Seasonal factors affecting the transport of harmful diatoms and dinoflagellates. *Marine Ecology Progress Series*. 176: 243-251.

In the preparation of these proposed regulations, the Marine Facilities Division (MFD) of the California State Lands Commission (the Commission) and the West Coast Ballast Outreach Project formed a Technical Advisory Group (TAG) in January 2003 to provide input toward the implementation of the provisions of Public Resources code (P.R.C.) §§71201.7. The TAG represented a wide cross section of the marine transportation, terminalling, and oil industries together with representatives from maritime shipping associations, state and local harbor organizations, port authorities, state and federal regulators, environmental organizations, and academicians. The members of the TAG extensively reviewed draft text of the regulations at two meetings and proposed necessary changes to text and requirements of the regulations. In addition, ballast water management practices adopted by the United Nations International Maritime Organization's International Convention for the Control and Management of Ships' Ballast Water and Sediments of February 2004 have been used in these proposed regulations.

REASONABLE ALTERNATIVES TO THE REGULATION AND THE AGENCY'S REASONS FOR REJECTING THOSE ALTERNATIVES.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

The possibility for exchanging ballast water in waters at least 200 m deep, and outside of "no-discharge zones" consisting of retention zones and marine protected areas was considered. However, the delineation of boundaries around these irregularly shaped, irregularly spaced areas combined with specific depth requirements would create a complex geographic patchwork where ballast exchange could occur in some areas and would be prohibited in others. Such a regulation would also be inconsistent with regulations in neighboring Pacific Region states and with regulations established by the International Maritime Organization. It was decided by members of the Technical Advisory Group that such a scenario would pose unreasonable difficulties for mariners attempting to comply as well as for enforcement.

SMALL BUSINESS IMPACTS.

The commission finds that the adoption of Title 2, Division 3, Chapter 1, Article 4.6 will not have a significant adverse impact on small business. None of the businesses that will be governed by these proposed regulations can be considered "small business" as defined in Government Code Section 11342.610.

Title 2, Division 3, Chapter 1, Article 4.6

The following is the initial statement of reasons for each of the regulations. Prior to the explanation for each provision, the text of the regulation is set forth indented and underlined.

Ballast Water Regulations for Vessels Arriving at California Ports or Places after Departing from Ports or Places within the Pacific Coast Region

Section 2280. Purpose, Applicability, and Date of Implementation.

- (a) The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 4.6 of the California Code of Regulations is to move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into waters that may impact the waters of the state, based on the best available technology economically achievable.

SPECIFIC PURPOSE OF THE REGULATION

This regulation addresses the overall intent of the proposed regulations in Article 4.6

NECESSITY

PRC §71201.7 authorizes the Commission to adopt regulations to implement the provisions of the amendments of the Marine Invasive Species Act (the Act). §2280(a) clearly states the purpose of the regulation.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (b) The provisions of Article 4.6 apply to all vessels arriving at a California port or place carrying ballast water from another port or place within the Pacific Coast Region. For the purposes of Article 4.6 all ports and places in the San Francisco Bay area east of the Golden Gate bridge including the Ports of Stockton and Sacramento, shall be construed as the same California port or place; and the Ports of Los Angeles, Long Beach and the El Segundo marine terminal shall be construed as the same California port or place.

SPECIFIC PURPOSE OF THE REGULATION

This provision specifies the vessels and voyages to which these regulations apply. It further clarifies applicability for two multiple port regions in California, by designating them each as single “ports” or “places”. For the purposes of this regulation, all ports and places in the San Francisco Bay area, and upstream from the Golden Gate Bridge to the port of Sacramento, will be considered a single “port or place”. Likewise, the Ports of Los Angeles, Long Beach and El Segundo shall be construed as a single port or place.

NECESSITY

Existing statutes that require ballast water management practices for vessels that arrive in California ports or places from outside the U.S. EEZ did not prescribe practices for vessels arriving at California ports or places after departing from ports or places within the U.S. EEZ and the Pacific Coast Region. Therefore, it is necessary to clearly identify the vessels to which these regulations apply.

The ‘port or place’ designation applied to the San Francisco Bay/San Joaquin Delta, and to the Los Angeles/Long Beach/El Segundo Port complexes are necessary due to the logistical and economic difficulties expected for many vessels in the absence of such a designation. It is anticipated that near-coastal ballast water exchange (at 50 nm from shore) will be the sole management option feasible for the majority of vessels. Without the ‘port or place’ designations presented here, the 50 nm requirement would

be problematic for a vessel transiting between ports contained within a single port region (i.e. the San Francisco Bay/Delta region). For example, a vessel traveling from Oakland to Stockton that had to discharge ballast for navigational purposes, would otherwise be required to leave San Francisco Bay and travel 50 nautical miles offshore before returning to the Bay and continuing inland to Stockton. Scientific experts consulted agreed that, biologically, the designation was reasonable given the current knowledge of NIS dispersal within an estuary, and given the logistical realities of vessel voyage patterns. This provision is therefore necessary to avoid unreasonable burdens for vessels transiting entirely within these multiple port regions.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (c) The provisions of Article 4.6 do not apply to vessels that arrive at a California port or place after departing from ports or places outside of the Pacific Coast Region.

SPECIFIC PURPOSE OF THE REGULATION

The purpose of this provision is to make clear that the regulations will not apply to vessels that arrive at a California port or place after departing from a port or place outside the Pacific Coast Region.

NECESSITY

This provision differentiates between the vessels to which the regulations will apply and those to which they will not apply, depending on their port or place of departure prior to their arrival at a port or place in California. Existing legislation requires that vessels entering California from ports or places outside of the US EEZ be subject to the ballast water management requirements of PRC §§ 71204.2. Upon adoption of this proposed rulemaking, vessels entering California from ports or places outside the Pacific Coast Region are subject to the ballast water management requirements of PRC §§ 71204.3. This provision clarifies to whom these requirements apply.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (d) The provisions of these regulations become effective 180 days after they have been filed with the Secretary of State.

SPECIFIC PURPOSE OF THE REGULATION

The purpose of this provision is to make clear that the effective date of the regulations.

NECESSITY

This provision will obviate ambiguity.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

Section 2281. Safety of Ballasting Operations.

- (a) The master, operator, or person in charge of a vessel is responsible for the safety of the vessel, its crew, and its passengers.
- (b) (1) The master, operator, or person in charge of a vessel is not required by this provision to conduct a ballast water management practice, including exchange, if the master determines that the practice would threaten the safety of the vessel, its crew, or its passengers because of adverse weather, vessel design limitations, equipment failure, or any other extraordinary conditions.
- (2) If a determination described in subsection (b)(1) is made, the master, operator, or person in charge of the vessel shall take all feasible measures, based on the best available technologies economically achievable, that do not compromise the safety of the vessel to minimize the discharge of ballast water containing nonindigenous species into the waters of the state, or waters that may impact the waters of the state.
- (c) Nothing in this provision relieves the master, operator, or person in charge of a vessel of the responsibility for ensuring the safety and stability of the vessel or the safety of the crew and passengers, or any other responsibility.

SPECIFIC PURPOSE OF THE REGULATION

This regulation describes special safety circumstances under which a vessel may not be required to perform ballast water management as directed in Article 4.6 of section 2284. It identifies the person(s) responsible for determining if a vessel has encountered such a circumstance, the person(s) responsible for the safety of the vessel and persons on board, and describes the obligations a vessel must strive to fulfill on those occasions.

NECESSITY

These provisions are prescribed directly by PRC §71203, and are reiterated here to maintain the continuity and clarity of Article 4.6

Ballast water is needed for the stability and navigation of most vessels. It may be taken in, discharged, or redistributed to compensate for unbalanced cargo, navigate through a channel or beneath a bridge, or to improve stability in rough seas. The process of ballast management, particularly ballast exchange, can place stress on a vessel. In some circumstances, including adverse weather, equipment failure, or because of some vessel designs, these processes can undermine safety. This provision is therefore necessary to ensure that the safety of a vessel, its crew, or its passengers is not compromised by the management requirements specified in the PRC. Should a vessel's master, operator or person in charge determine that the vessel has encountered such a situation, the provision is also necessary to ensure that the vessel makes every feasible effort to minimize nonindigenous species discharge in waters impacting the state, while reasonably maintaining safety.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives which would be more effective in maintaining safety of vessels, crew, and passengers while carrying out the purposes of the proposed regulation, or would be as effective and less burdensome to affected private persons.

Section 2282. Definitions.

Unless the context otherwise requires, the following definitions shall govern the construction of this Article:

- (a) "Coastal waters" means estuarine and ocean waters within 200 nautical miles of land or less than 2,000 meters (6,560 feet, 1,093 fathoms) deep, and rivers, lakes, or other water bodies navigably connected to the ocean.
- (b) "Commission" means the California State Lands Commission.

- (c) "Exchange" means to replace the water in a ballast tank using either of the following methods:
- (1) "Flow through exchange," which means to flush out ballast water by pumping three full volumes of near-coastal water through the tank, continuously displacing water from the tank, to minimize the number of original coastal organisms remaining in the tank.
- (2) "Empty/refill exchange," which means to pump out, until the tank is empty or as close to 100 percent empty as is safe to do so, the ballast water taken on in ports, or estuarine or territorial waters, then to refill the tank with near-coastal waters.
- (f) "Near-coastal waters" means waters that are more than 50 nautical miles from land and at least 200 meters (656 feet, 109 fathoms) deep.
- (g) "Pacific Coast Region" means all coastal waters on the Pacific Coast of North America east of 154 degrees W longitude and north of 25 degrees N latitude, exclusive of the Gulf of California.
- (h) "Vessel" means a vessel of 300 gross registered tons or more.

SPECIFIC PURPOSE OF THE REGULATION

The purpose of section 2282 is to define several key terms that are used throughout the language of the regulation to describe management requirements and regulation applicability. These definitions ensure that the ballast specific management practices are clear to the shipping industry, and compliance occurs as intended by the regulation.

NECESSITY

All the aforementioned provisions, except Section 2282(f), are defined directly by PRC §71200 and are reiterated here to maintain the continuity and clarity of Article 4.6.

Specific terms are used in the regulation text to describe fundamental components of the regulation, including which vessels and voyages are required to comply, locations where certain management practices may take place, and what constitutes ballast water exchange. Without clarification, many of these terms can be subject to differing interpretation. These definitions, therefore, are necessary to ensure that the presented regulations precisely convey the requirements of this regulation.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

Section 2283. Alternatives.

(a) Petitions for Alternatives.

- (1) Any person subject to these regulations may submit a petition to the Commission for alternatives to the requirements of Article 4.6 as applied to the petitioner.**
- (2) All petitions for alternatives must be submitted in writing. A petition may be in any form, but it must contain all data and information necessary to evaluate its merits.**

(b) Approval of Alternatives.

- (1) The Commission may approve any proposed alternatives to the requirements of Article 4.6 if it determines that the proposed alternatives will fulfill the purpose of these regulations as outlined in subsection (a) of Section 2280 of this Article.**
- (2) If the Commission approves any proposed alternatives under this section, a letter of approval shall be issued to the petitioner setting forth the findings upon which the approval is based.**
- (3) The Commission may withdraw the letter of approval of any alternative requirements at any time if it finds that the person or persons subject to these regulations have not complied with the approved alternative requirements.**
- (4) Withdrawal of a letter of approval under this section shall be effective upon receipt by the petitioner of written notification of the withdrawal from the Commission.**

SPECIFIC PURPOSE OF THE REGULATION

In unusual cases, compliance with the ballast water management requirements described in this regulation may present some hardship not related to safety. It is anticipated that these situations will be infrequent and unique, and should they arise, will affect only a small minority of shipping companies, vessels, or voyage routes. This section describes a process for the submission and approval of petitions for alternatives to Article 4.6, should such cases occur. Alternatives proposed in petitions must fulfill the purpose of the regulation in section 2280 (a), and will be approved or withdrawn by the commission.

NECESSITY

The shipping industry expressed concern that a small minority of vessels and/or commercial shipping routes may be severely impacted by the ballast management requirements presented by these regulations. The uniqueness and rarity of such cases excluded them from direct inclusion into the regulation. Rather, a petition process would allow impacted entities to present individual hardship cases and associated alternative ballast management proposals to the Commission. Additionally, environmental organizations expressed concern that some sort of public notification and/or review process be included in this rulemaking process to ensure that the public is informed on the application of this alternative compliance process. This section is necessary to provide flexibility for the Commission to consider special hardship cases from the maritime industry, and associated alternative management proposals, on a case-by-case basis, while providing a formal public notification and/or review process.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

Section 2284. Ballast Water Management Requirements

- (a) The master, operator, or person in charge of a vessel that arrives at a California port or place from another port or place within the Pacific Coast Region shall employ at least one of the following ballast water management practices:

SPECIFIC PURPOSE OF THE REGULATION

This section offers five specific ballast water management options for vessels that arrive to a California port or place from a port or place within the Pacific Coast Region. Through meetings of a Technical Advisory Committee, the ballast water management options described here have been deemed as the most biologically effective and economically feasible actions that would move expeditiously toward the elimination of the discharge of nonindigenous species into the waters of the state.

NECESSITY

The implementation of ballast water management regulations for vessels traveling within the Pacific Coast Region is mandated by §§71204.5 of the PRC. Currently, vessels traveling wholly within the US EEZ are not subject to ballast management requirements, even though research indicates that ballast water transferred between ports within a region can spread nonindigenous marine, estuarine, and aquatic species.

This section is required to delineate specific ballast water management actions a vessel may conduct to comply with the regulation.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (1) Exchange the vessel's ballast water in near-coastal waters, before entering the waters of the state, if that ballast water has been taken on in a port or place or within the Pacific Coast region.

SPECIFIC PURPOSE OF THE REGULATION

This section presents near coastal ballast water exchange as one of five ballast water management practices that a vessel traveling between ports within the Pacific Coast Region may conduct. During exchange, the biologically rich water that is loaded while a vessel is in port or near the coast is exchanged with the comparatively depauperate and inhospitable waters of the open ocean. Scientific research indicates that offshore ballast exchange eliminates 70% - 95% of the organisms originally taken into a tank while at or near port. In addition, most vessels can conduct exchange without any structural modification.

NECESSITY

For the vast majority of commercial vessels that fall under this regulation, open ocean ballast exchange will be the primary method of ballast water management. Currently, it is the best compromise of efficacy, environmental safety, and economic practicality. The vast majority of vessels are capable of conducting exchange, and the management practice does not require any special structural modification to most of the vessels in operation.

The requirement to conduct ballast water exchange in "near coastal waters" that are at least 50 nautical miles (nm) from shore, was selected based on input received from the scientific community, maritime industries, and state and federal government management agencies during several workshops. These workshops were held to ensure that decision was founded upon the best scientific information available, while also considering concerns of affected industries. The 50 nautical mile limit incorporates several key issues. Although ballast water exchange at distances more than 200 nm offshore is considered the most biologically prudent to prevent NIS discharge in port under such a requirement vessels traveling within the Pacific Coast Region could be diverted more than 100 nm offshore from their normal route. For most voyages, the 50 nm distance would require no course deviation for some vessels and a minor deviation for many. Exchange at 50 nm avoids ballast discharge in coastal "retention zones" and

at the mouths of estuaries, where currents and tides can carry organisms to shore or sweep them into bays and estuaries. The limit also lies beyond the boundaries of sensitive protected areas, such as Marine Sanctuaries. Further, the maritime industry requested that California's regulation be consistent with other U.S. state, federal and international regulations, in order to avoid confusion that would occur should vessels encounter a patchwork of varying regulations as they traveled across jurisdictions. The 50 nautical mile limit also addressed this request, as Washington, and the International Maritime Organization require that ballast water exchange be conducted 50 nm offshore. Additionally, Oregon is considering legislation that would adopt the 50 nm offshore ballast water exchange requirement.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

As an alternative to the requirement to exchange a designated distance offshore, the possibility for exchanging ballast water in waters at least 200 m depth, and outside of "no-discharge zones" consisting of retention zones and marine protected areas, was considered. However, the delineation of boundaries around these irregularly shaped, irregularly spaced areas combined with specific depth requirements would create a complex geographic patchwork where ballast exchange could occur in some areas and would be prohibited in others. Such a regulation would also be inconsistent with regulations in neighboring Pacific Region states and with regulations established by the International Maritime Organization. It was decided by members of the Technical Advisory Group that such a scenario would pose unreasonable confusion for mariners attempting to comply, as well as for enforcement.

(2) Retain all ballast water on board the vessel.

SPECIFIC PURPOSE OF THE REGULATION

This section presents and describes the second of five ballast management practices vessels may conduct. Whenever possible, vessels can refrain from discharging any ballast water into the waters of the state or into waters that impact the state.

NECESSITY

Some vessels on some voyages will be able to complete cargo and navigational operations without discharging any ballast water within California state waters or in waters which impact the state. Retention is, logically, the most effective management technique for eliminating the discharge of nonindigenous species through ballast water. This option is therefore necessary to encourage vessels to retain ballast water on board, whenever it is safe to do so.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (3) Use an alternative, environmentally sound method of ballast water management that, before the vessel begins the voyage, has been approved by the commission or the United States Coast Guard as being at least as effective as exchange, using mid-ocean waters, in removing or killing nonindigenous species.
- (4) Discharge the ballast water to a reception facility approved by the commission.

SPECIFIC PURPOSE OF THE REGULATION

These sections present and describe the third and fourth of five ballast management practices vessels may conduct. Ballast water may be treated prior to discharge using shipboard or shore side treatment systems that have been approved by the Commission.

NECESSITY

Though it is anticipated that near coastal exchange will be employed by nearly all vessels subject to this ballast water management regulation, it is widely considered an interim ballast water management tool due to several operational limitations. An effective exchange can take several hours to complete, and in some circumstances, may not be possible without compromising safety (i.e. adverse sea conditions, antiquated vessel design). In the future, a vessel would ideally utilize alternative ship-based or shore side treatment systems that reduce organisms in ballast water as well as or better than open ocean exchange. The development of these systems has been encouraged through government financial and regulatory incentives, and several are currently in conceptual or experimental testing stages. None, however, are available for widespread application. These sections are necessary in the event that effective alternative treatment technologies are available prior to the sunset of AB 433 on January 1, 2010. They are also necessary to encourage private and industry investment in the advancement of alternative ballast water treatment systems.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.

- (5) Under extraordinary circumstances, perform a ballast water exchange within an area agreed to by the commission in consultation with the United States Coast Guard at or before the time of the request.

SPECIFIC PURPOSE OF THE REGULATION

This section presents the fifth ballast water management practice that vessels may conduct. Specifically, this management option is offered for the rare times when a vessel is unable to conduct any of the four management options described in Sections 2284 1-4 of this regulation.

NECESSITY

Under extraordinary circumstances, a vessel may be completely unable to complete any of ballast water management options described in section 2284 (a-e). In such a circumstance, he or she is required to take all feasible measures to minimize the discharge of ballast water containing nonindigenous species into state waters, without compromising safety. Section 2284 is essential to assure that vessels make every attempt to conduct ballast management during instances when the remaining management options are not possible.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION THAT WOULD LESSEN ANY ADVERSE IMPACT ON AFFECTED PRIVATE PERSONS.

The Commission Staff has determined that there are no alternatives considered which would be more effective in carrying out the purposes of the proposed regulation or would be as effective and less burdensome to affected private persons.